Studies in the Genus Myodites Latreille (Coleoptera, Rhipiphoridae).

By W. DWIGHT PIERCE, Denver, Colorado.

The following studies are based upon a small series of specimens, loaned me by Mr. Warren Knaus. This series is especially interesting becauses it furnishes a new type of female. In all species hitherto examined by myself the female antenna is monopectinate, and the male antenna is biflabellate, with very long rami of which the tips are about even at apex. In the species *Myodites knausi* described below the female antenna is monoflabellate, with the rami longest at base, diminishing in length toward the apex.

Table of American Species of Myodites.
1—First joint of hind tarsi elevated, obliquely truncate and emarginate
at tip; elytra yellow
First joint of hind tarsi long, but slightly thicker, not obliquely truncate
2—Female abdomen black, or partly black
Female abdomen yellow or red, male abdomen?; or female abdomen? male abdomen dark brown or black
3—First joint of hind tarsi stout, not more than one-half longer than
second; prothorax sparsely punctulate, smooth on each side and front; length 6 mm.; New Yorkluteipennis LeConte
First joint of hind tarsi long.
4—First joint of hind tarsi as long as fourth, slightly thicker than the
second; prothorax sparsely punctulate behind, nearly smooth
in front; female antennae black, pectinate; length 5 mm.
Nevada
thicker than the second and third combined; prothorax densely
punctulate behind, nearly smooth on scutal area; abdomen of
both sexes with considerable yellow. Female pygidium black;
female antennae yellowish, flabellate; length 9 mm.; Utah
knausi n. sp. 5—Prothorax sparsely punctulate or smooth on disc
5
Prothorax densely punctulate
6—Prothorax smooth on disc
Prothorax partially smooth on discvierecki Fall
7—First joint of hind tarsi stout and thick, not more than one-half longer than the second; vertex sparsely punctulate obtusely
rounded

8-	First joint of hind tarsi long, thicker than second and more than twice as long; vertex sparsely punctulate, not carinate; female abdomen yellow; length 7.5 mm.; Maryland semiflavus LeConte-Color honey-yellow; prothorax with sides, median line and base black; prothorax smooth; male unknown; female abdomen yellow; length 7.3 mm.; Colorado popenoi LeConte
	Color black; prothorax smooth on disc, coarsely punctulate at base on sides; male abdomen with dark brown luster; female un-
9-	known; length 4 mm.; Nebraskaminimus Pierce -Female abdomen red or yellowish-red; pygidium reddish; first joint of hind tarsi very long, very little thicker than the second; pro-
	thorax and vertex densely punctulate, the latter carinate; length 8 mm.; Oklahoma and Kansasscaber LeConte Female abdomen red, pygidium black; male abdomen black; first
	joint of hind tarsi stout and very thick, and more than twice as long as the second and the third joints together; male an-
	tennae honey-yellow (a variety from western Nebraska has the antennae orange color); length 8 mm.; Nebraska; plant host Solidago spp; insect host Epinomia triangulifera Vachal,
I O	solidaginis Pierce -Elytra shining yellow, or black only at base; head and prothorax
r r	densely punctulate
. 1	long as the others united, scarcely thicker, not emarginate at tip; length 5 mm; California
ī 2—	Elytra black at base
	Female abdomen dark brown; hind tarsi with first joint as long as succeeding three joints; about one and one-half as thick, and
T 2	slightly emarginate, and obliquely truncate; length 6 mm. Nebraska
	Hind tibiae strongly compressed; body black; elytra black with dark reddish-yellow spot; length 6 mm; Florida; insect host.
14	Augochlora pura Say, ♂ schwarzi LeConte -Vertex strongly elevated and compressed; length 6.5 mm.; New York (zeschii LeConte)♀ schwarzi LeConte
15-	Vertex feebly elevated
	fuscous; legs fusco-testaceous; length 5 mm.; Illinois, New York and Massachusetts
	black; antennae fusco-testaceous; legs obscurely testaceous; length 2.5 to 3 mm; Canada, New York, and District of Col-
	numbia stylabidas Nayman

Myodites knausi n. sp.

The specimens on which this description is based are from the collection of Mr. Warren Knaus, and include four females collected at St. George, Utah, June 10, 1919, at an altitude of 2800 feet; and two females and one male collected at Hurricane, Utah, June 14–18, 1919, at an altitude of 3200 feet. I have chosen as types the male and one female from Hurricane.

Q: Length 9 mm.; Head shining black, depressed, finely and evenly punctulate, clad with dense yellowish white perpendicular pubescence; vertex prominent, broadly rounded; eyes shining black, minutely facetted. Antennae ten-jointed, nine-flabellate, pubescent; joints honey-yellow, darkening toward apex, the last joints almost entirely brownish; the flabellae diminishing in length toward apex, but the flabella of the tenth joint equals the basis of the three preceding joints. Mandibles with the exterior side black, punctulate, densely pubescent, beyond which there is a slight reddish tinge; apices shining glabrous, acuminate. Palpi yellowish, tinged with brown, pubescent.

Prothorax black, shining, more or less denuded in scutal zone, densely pubescent at base, sides and in scutellar sone; irregularly punctulate, not carinate. Elytra honey-yellow with brownish base. Metathorax shining glabrous. The thorax beneath and on sides is minutely punctulate and densely pubescent. Wings hyaline, with large fuscous cloud on

costal margin and on disc beyond middle.

Legs honey-yellow, with joints darkened at base and apex, tarsal joints darker. Femora stout, densely pubescent, shining and minutely punctulate. Tibiae straight, slightly enlarged toward tip, bi-unguiculate, densely pubescent, and rather c osely and minutely punctulate. Anterior tarsi with first joint slightly longer than following three, fifth longer than first, claws almost as long as first joint, and strongly pectinate. Middle tarsi with first joint as long as fifth joint, claws strongly pectinate, but not as long as first joint. Hind tarsi with first joint elongate, enlarged, and apically diagonally truncate, almost twice as long as the two following joints, and longer than the fourth joint; claws two-thirds as long as the fourth joint, and strongly pectinate.

Abdomen with dorsum of first five segments black, but with intersegmental skins yellow. The venters of these same segments are also black with yellow inter-segmental skins. The pygidial area is yellow with infuscation beyond the middle. The entire surface of the abdomen is sparsely punctulate pubescent.

♂: Length 9 mm. Similar to the female, with the following exceptions: antennae honey-yellow, bi-flabellate, with the tips of the rami about even. The abdomen is black with the base and apex of the first ventral segment yellow, and the prepygidial area yellow, but with the pygidium black.

Myodites solidaginis Pierce.

A female specimen from Tempe, Arizona, collected October 22, 1919, measuring 6 mm. answers in all other respects to the description of this species, and cannot be separated with sufficient characters from a specimen of the paratype series.

Myodites scaber LeConte.

A normal specimen of the female of this species from Mc-Pherson, Kansas, collected by Mr. Warren Knaus, is at hand.

A small specimen from Hurricane, Utah, collected by Mr. Knaus, June 14–18, 1919, at an altitude of 3200 feet, answers in general to the description and compares quite closely to the Kansas specimen, but measures only 7 mm. in length, and has the wings hyaline, with only a dark fuscous clouding in the form of fascia beyond the middle. It also differs by having the vertex not carinate. This may be a different species, but it is inadvisable to so describe it without the other sex.

The Eggs of Boletotherus bifurcus Fab. (Col).

While collecting fungi in a swamp at Union, New Jersey, on August 4, our attention was attracted by numerous, small, oval, discolored blisters on the upper surface of a specimen of Fomes applanatus. These blisters or egg capsules were composed of dark excrement-like material, each being oval or suboval in outline, about 3.5 mm. long, 2.5 mm. wide and from I to 1.5 mm. high in the centre, sloping toward the edges. The average thickness of the wall of a capsule was about 0.5 mm. Each capsule contained either a recently hatched larva or a single egg resting on its side. The translucent eggs were cylindrical with broadly rounded ends and varied in length from 1.7 mm. to 2 mm. and in width from 0.8 mm. to 1 mm. Several eggs were found which were only three-fourths of the above measurements. The outer covering of each egg was whitish and marked with slightly raised dots. Upon hatching, the larva bores directly into the fungus and in time, the capsule weathers away. Many of the capsules were placed in crevices or irregularities on the upper surface of the fungus.

HARRY B. Weiss and Erdman West, New Brunswick, N. J.